

SOCIAL INEQUALITY AND ITS ENVIRONMENTAL HEALTH CONSEQUENCES AMONG 9-10 YEAR OLD CHILDREN

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Background and Aims: Socio-economic status (SES) determines the people's potentials and the most essential environmental related health effects from the moment of fertilization until death. During the data analysis of the Hungarian country-wide respiratory survey we often met the determining role of social inequalities in both the level of environmental exposure and the health status of the children. The poster presents some of these "dose-response" relationships using a complex SES variable.

Methods: Source of the analysed data was the database of the country-wide survey on the children's respiratory health (OGYELF) covering all children attending 3rd grade classes with at least 10 pupils. The parents-completed questionnaires containing questions on the presence of respiratory and allergic symptoms and their possible risk factors, including socio-economic status, were sent back from 2,160 schools (79.2%) out of the 2,726 ones approached. Altogether 62,711 questionnaires (76.4% of the ones sent to these schools) were evaluated. A complex SES variable was constructed from 4 questions (low level of the mother's education, one-parent family, regular state benefit and self-rated low level of subsistence). Associations were analysed by multivariate logistic regression using STATA/SE 10.0.

Results: Several environmental risk factors showed significant dose-response relationships with SES which are, even in themselves, significant risk factors of the studied respiratory symptoms (e.g. heating with coal or wood-fired stoves or with gas cooker, crowdedness, environmental tobacco smoke, smoking during pregnancy, waste dump site near the home). Out of the studied health outcomes the prevalence of both chronic bronchitic and asthmatic symptoms showed significant dose-response relationships with the disadvantageous socio-economic status, while the prevalence of allergic symptoms showed opposite tendency.

Conclusions: Besides decreasing the harmful effects of environmental risk factors, reduction of social inequalities is inevitable in order to improve the health status of the population.